

## General

### Title

Cervical cancer screening: percentage of eligible women with at least one Pap test in a 42-month time frame.

### Source(s)

Canadian Partnership Against Cancer. Cervical cancer screening in Canada: monitoring & evaluation of quality indicators. Toronto (ON): Canadian Partnership Against Cancer; 2016 May. 81 p.

## Measure Domain

### Primary Measure Domain

Population Health Quality Measures: Population Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of eligible women with at least one Pap test in a 42-month time frame.

### Rationale

The introduction of cervical cancer screening using the Papanicolaou test (Pap test) has led to significant reductions in cervical cancer incidence and mortality in Canada. From 1977 to 2015, the incidence of invasive cervical cancer declined from 15.4 per 100,000 to an estimated 7.5 per 100,000 and invasive cervical cancer mortality declined from 4.8 per 100,000 to an estimated 1.6 per 100,000 (Canadian Cancer Society, Advisory Committee on Cancer Statistics, 2015). Despite this success, in 2015, an estimated 1,500 Canadian women will be diagnosed with invasive cervical cancer and 380 will die from the disease (Canadian Cancer Society, Advisory Committee on Cancer Statistics, 2015). Many of these women were not screened in the five years before their diagnosis, were not followed up appropriately after an

abnormal Pap test result, or the Pap test failed to detect their cancer. Additionally, women with lower levels of income, education, new immigrants, women living in rural or remote locations, and who have limited access to screening are less likely to be screened (Canadian Partnership Against Cancer, 2014). For these reasons, it is critical to continuously monitor and evaluate cervical cancer screening to ensure that Canadian women receive high-quality cancer prevention services.

Measuring screening participation is important since women who are not screened at the recommended interval or who have never been screened have a higher risk of developing cervical cancer and are more frequently diagnosed at an advanced stage (Canadian Partnership Against Cancer, 2011; Health Canada, 2002; Woltman & Newbold, 2007).

## Evidence for Rationale

Canadian Cancer Society, Advisory Committee on Cancer Statistics. Canadian cancer statistics 2015. Toronto (ON): Canadian Cancer Society; 2015. 151 p.

Canadian Partnership Against Cancer. Cervical cancer screening in Canada: monitoring & evaluation of quality indicators. Toronto (ON): Canadian Partnership Against Cancer; 2016 May. 81 p.

Canadian Partnership Against Cancer. Cervical cancer screening in Canada: monitoring program performance 2006-2008. Toronto (ON): Canadian Partnership Against Cancer; 2011 Dec. 83 p.

Canadian Partnership Against Cancer. Examining disparities in cancer control: a system performance special focus report. Toronto (ON): Canadian Partnership Against Cancer; 2014 Feb. 88 p.

Health Canada. Cervical cancer screening in Canada: 1998 surveillance report. Ottawa (ON): Minister of Public Works and Government Services Canada; 2002. 61 p.

Woltman KJ, Newbold KB. Immigrant women and cervical cancer screening uptake: a multilevel analysis. Can J Public Health. 2007 Nov-Dec;98(6):470-5. [PubMed](#)

## Primary Health Components

Cervical cancer screening; Pap test

## Denominator Description

Number of women in the target population (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

Number of women with at least one Pap test in a 42-month time frame (see the related "Numerator Inclusions/Exclusions" field)

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

A systematic review of the clinical research literature (e.g., Cochrane Review)

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Additional Information Supporting Need for the Measure

Cervical cancer is caused by infection with the human papillomavirus (HPV) (Trottier & Franco, 2006; Dawar, Deeks, & Dobson, 2007). Of the more than 100 types of identified HPV, 40 infect the genital tract; of these, approximately 15 are considered high risk, with types 16 and 18 causally linked to 70% of cervical cancer cases. HPV is a highly prevalent sexually transmitted virus; peak prevalence occurs during adolescence and the early 20s after the commencement of sexual activity.

Most HPV infections are transient and are cleared by the immune system without signs or symptoms. However, a small percentage of women experience persistent infections. For these women, the average time between becoming infected with a high risk HPV type and developing a pre-cancerous lesion is 24 months, with a further eight to 12 years before the development of invasive cervical cancer. Because of this long latency period, screening is an effective strategy for the identification and treatment of pre-cancerous cervical lesions.

## Evidence for Additional Information Supporting Need for the Measure

Canadian Partnership Against Cancer. Cervical cancer screening in Canada: monitoring & evaluation of quality indicators. Toronto (ON): Canadian Partnership Against Cancer; 2016 May. 81 p.

Dawar M, Deeks S, Dobson S. Human papillomavirus vaccines launch a new era in cervical cancer prevention. CMAJ. 2007 Aug 28;177(5):456-61.

Trottier H, Franco EL. The epidemiology of genital human papillomavirus infection. Vaccine. 2006 Mar 30;24 Suppl 1:S1-15. [PubMed](#)

## Extent of Measure Testing

Unspecified

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

## Measurement Setting

Ambulatory/Office-based Care

State/Provincial Public Health Programs

## Professionals Involved in Delivery of Health Services

not defined yet

## Least Aggregated Level of Services Delivery Addressed

State/Provincial

## Statement of Acceptable Minimum Sample Size

Does not apply to this measure

## Target Population Age

Age 21 to 69 years

## Target Population Gender

Female (only)

## National Framework for Public Health Quality

### Public Health Aims for Quality

Health Promoting

Population-centered

Vigilant

## National Strategy for Quality Improvement in Health Care

### National Quality Strategy Aim

Healthy People/Healthy Communities

### National Quality Strategy Priority

Health and Well-being of Communities

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Staying Healthy

## IOM Domain

Effectiveness

## Data Collection for the Measure

### Case Finding Period

January 1, 2010 to June 30, 2013

### Denominator Sampling Frame

Geographically defined

### Denominator (Index) Event or Characteristic

Patient/Individual (Consumer) Characteristic

### Denominator Time Window

not defined yet

### Denominator Inclusions/Exclusions

#### Inclusions

Number of women in the target population\*

Note:

Number of women in the target population on June 30, 2011  
Define population using Statistics Canada population estimates at the mid-point of each time frame.  
Do not exclude women who have had a cervical cancer diagnosis.

\*Women 21 to 69 years of age

#### Exclude

Exclude women who have had a hysterectomy if possible.

### Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

### Inclusions

Number of women with at least one Pap test in a 42-month time frame

### Note:

Calculate age at Pap test date. Use the first Pap test that occurs in the 3-year time frame. Use the date the Pap test was performed. If the date that the Pap test was performed is not available, use the date the Pap test was processed by the lab. Do not exclude women who have had a cervical cancer diagnosis.

### Exclusions

Exclude women who have had a hysterectomy if possible and note methodology when submitting data.

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

State/Province public health data

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Cervical Cancer Screening Pathway with Quality Indicators

## Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Desired value is a higher score

## Allowance for Patient or Population Factors

not defined yet

## Description of Allowance for Patient or Population Factors

Calculate age-specific rates.

Calculate age-standardized rate for the 21 to 69 age group standardized to the 2011 Canadian population.

Age Groups: 18-20, 21-24, 25-29, 30-39, 40-49, 50-59, 60-69, 70-74

## Standard of Comparison

not defined yet

## Prescriptive Standard

Target: Greater than or equal to 80% of women 21 to 69 years of age should be screened in the previous 42 months (three years plus six months).

## Evidence for Prescriptive Standard

Canadian Partnership Against Cancer. Cervical cancer screening in Canada: monitoring & evaluation of quality indicators. Toronto (ON): Canadian Partnership Against Cancer; 2016 May. 81 p.

## Identifying Information

### Original Title

1b. Participation rate.

### Measure Collection Name

Cervical Cancer Screening Indicators

### Submitter

Canadian Partnership Against Cancer - National Government Agency [Non-U.S.]

### Developer

Canadian Partnership Against Cancer - National Government Agency [Non-U.S.]

Public Health Agency of Canada - National Government Agency [Non-U.S.]

### Funding Source(s)

A financial contribution from Health Canada, through the Canadian Partnership Against Cancer

### Composition of the Group that Developed the Measure

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## Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2016 May

## Measure Maintenance

Unspecified



## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in February 2017.

## Measure Availability

Source available from the [Canadian Partnership Against Cancer Web site](#) .

For more information, contact the Canadian Partnership Against Cancer at 1 University Ave, Suite 300, Toronto, ON, Canada M5J 2P1; Phone: 1-877-360-1665; E-mail: [info@cancerview.ca](mailto:info@cancerview.ca); Web site: [www.cancerview.ca](http://www.cancerview.ca) .

## Companion Documents

The following is available:

Canadian Partnership Against Cancer. Cervical cancer screening in Canada: setting targets for program performance. Toronto (ON): Canadian Partnership Against Cancer; 2013 Nov 13. 27 p. This document is available from the [Canadian Partnership Against Cancer Web site](#)

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## NQMC Status

This NQMC summary was completed by ECRI Institute on August 22, 2016. The information was verified by the measure developer on September 27, 2016.

The information was reaffirmed by the measure developer on February 1, 2017.

## Copyright Statement

No copyright restrictions apply.

## Production

### Source(s)

Canadian Partnership Against Cancer. Cervical cancer screening in Canada: monitoring & evaluation of quality indicators. Toronto (ON): Canadian Partnership Against Cancer; 2016 May. 81 p.

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